

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SET 14 2014

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Jim Harris
Environmental Manager
Horsehead Metal Products, Inc.
484 Hicks Grove Road
Mooresboro, North Carolina 28533

SUBJ: RCRA Compliance Evaluation Inspection

Horsehead Metal Products, Inc. EPA ID# NCR000159038

Dear Mr. Harris:

Enclosed is a copy of the U.S. Environmental Protection Agency inspection report documenting the results of the August 13, 2014, inspection of Horsehead Metal Products, Inc. located at 484 Hicks Grove Road in Mooresboro, North Carolina. This was an EPA compliance evaluation inspection (CEI) for the purpose of evaluating the facility's compliance with the applicable Resource Conservation and Recovery Act (RCRA) regulations.

Enclosed is the CEI report that documents apparent violations of RCRA. A copy of this report has been forwarded to the North Carolina Department of Environment and Natural Resources (NCDENR).

If you have any questions regarding this matter, please contact Paula Whiting by phone at (404) 562-9277 or by email at whiting.paula@epa.gov.

Sincerely,

Nanky McKee

Chief, North Enforcement and Compliance Section RCRA and OPA Enforcement and Compliance Branch

Enclosure

cc: Spring Allen, NCDENR (sent via e-mail)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION 4** ATLANTA FEDERAL CENTER **61 FORSYTH STREET**

ATLANTA, GEORGIA 30303-8960

DCT 1 4 2014

Julie Woosley, Chief Hazardous Waste Section North Carolina Department of Environment and Natural Resources 1646 Mail Service Center 217 West Jones Street Raleigh, North Carolina 27699-1646

SUBJ: RCRA Compliance Evaluation Inspection Horsehead Metal Products, Inc. EPA 1D# NCR000159038

Dear Ms. Woosley:

On August 13, 2014, a U.S. Environmental Protection Agency compliance evaluation inspection was conducted at Horsehead Metal Products, Inc. located in Mooresboro, North Carolina, to determine the facility's compliance status with the Resource Conservation and Recovery Act (RCRA).

Enclosed is the CEI report that documents apparent violations of RCRA. The EPA considers this facility to be a Secondary Violator.

If you have any questions regarding this matter, please contact Paula Whiting by phone at (404) 562-9277 or by email at whiting.paula@epa.gov.

Sincerely,

Nancy McKee

Chief, North Enforcement and Compliance Section RCRA and OPA Enforcement and Compliance

Branch

Enclosure

RCRA Inspection Report

1) Inspector and Author of the Report

Paula A. Whiting
Environmental Engineer
RCRA and OPA Enforcement and Compliance Branch
US EPA Region 4 SNAFC – 10th Floor
61 Forsyth Street, SW
Atlanta, Georgia 30303
whiting.paula@epa.gov
(404) 562-9277

2) <u>Facility Information</u>

Horsehead Metal Products, Inc. 484 Hicks Grove Road Mooresboro, North Carolina 28533 Rutherford County EPA ID# NCR000159038

3) Responsible Official

Jim Harris, Environmental Manager

4) <u>Inspection Participants</u>

Jim Harris Horsehead Metal Products, Inc.
Scott Hoenecke Horsehead Metal Products Inc.

Scott Hoenecke Horsehead Metal Products, Inc.
Diego Rojas Horsehead Metal Products, Inc.

Spring Allen NCDENR
Brent Burch NCDENR

Paula Whiting US EPA Region 4

5) Date and Time of Inspection

August 13, 2014, at 8 a.m. EDT

6) Applicable Regulations

Resource Conservation and Recovery Act (RCRA), 42 U.S.C.A. §§ 6901 to 6992

Sections 3005 and 3007 of RCRA, 42 U.S.C.A. §§6925 and 6927

40 Code of Federal Regulations (C.F.R.) Parts 260-270, 273, and 279

Title 15A, Chapter 13, North Carolina Administrative Code (NCAC)

EPA-RCRA CEI Report Horsehead Metal Products, Inc. NCR000159038 August 13, 2014

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced RCRA compliance evaluation inspection (CEI) to determine the Horsehead Metal Products, Inc.'s (HHMP), EPA ID# NCR000159038, compliance with the applicable regulations.

8) Facility Description

Horsehead Metal Products, Inc., located in Mooresboro, North Carolina, is zinc and diversified metals production facility. This facility utilizes solvent extraction and electro-winning technology to selectively remove and refine valuable metals from electric arc furnace-based feed and other recycled materials into special high-grade zinc and other metal concentrates containing silver, copper and lead. Solvent extraction selectively extracts zinc from a solution containing the multiple constituents typical of Horsehead's recycled feedstock. This facility will produce special high-grade (SHG) zinc and continuous-galvanizing grade (CGG) in addition to the Prime Western (PW) grade that HHMP currently produces.

The facility currently has five active production areas, one production area being constructed and a reagent storage area. The Area 100 (leaching) takes the waelz oxide (WOX) dust and washes it with bleed treatment solution from Area 300 to remove chloride and potassium. Then the slurry is fed into the Leaching unit to dissolve most of the contained zinc in the WOX. The purified aqueous solution called pregnant leaching solution (PLS) is heated and pumped to the Area 200 (solvent extraction).

The Area 200 which produces ultra-high quality zinc loaded electrolyte is divided in to four subsections: extraction, washing, stripping and depletion. The extraction stage transfers the zinc from the PLS to a ligand exchange reagent. The washing stage removes impurities from the zinc loaded organic phase using physical and chemical washings. The stripping stage strips out the zinc content using an acidic aqueous solution. The depletion stage takes a small bleed from the slurry and treats it with gypsum precipitation, cementation and zinc depletion to reduce the amount of zinc and some of the impurities in the final liquid effluent. Depletion stage takes place in Area 300.

The Area 400 (electro-winning) produces zinc metal from the zinc-bearing solution (loaded electrolyte). Direct current is applied to the solution, so a deposit of zinc metal is grown from the electrolyte onto aluminum cathodes. The zinc plates are then mechanically stripped and sent to Area 500 melting. The zinc-depleted solution (spent electrolyte) is recycled to the Stripping unit in Area 200.

Area 500 (fumaces) consists of melting, alloying and casting using four induction furnaces and a casting operation.

Area 600 is the PLINT process which recovers lead and silver from the leaching (lead) residue. In this stage, lead and silver contained in the leaching residue is dissolved in a hot brine solution to obtain a solid residue free of lead and chlorides. This area is currently being constructed and is not in operation.

Area 700 is designated as an area for reagents preparation and distribution to the plant. This area is used for reagent storage, has two lime silos, six WOX silos, a soda ash silo and hydrated lime storage silo.

HHMP's most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated June 19, 2014, characterized the facility as a large quantity generator (LQG) of hazardous waste.

Currently, HHMP generates oils and lubricants, solvents and debris and waste rags as well as universal waste batteries, lamps and other wastes which include EPA Waste Codes D001, D002, D006, D008, D035, F003, and F005 wastes.

9) Previous Inspection History

On June 11, 2014, NCDENR conducted a compliance evaluation inspection based on a complaint and no apparent violations were found at the time of the inspection.

10) Findings

Upon arriving at the HHMP facility, the inspectors presented their credentials to the security guard and signed in. Mr. Jim Harris, Environmental Manager, HHMP, received the inspectors. The inspectors introduced themselves, showed their credentials, and explained the purpose of the visit. The inspectors then performed a walk-through inspection of the facility. Below is a description of the observations made during the walk-through.

10.1. WOX Unloading

The waelz oxide (WOX) dust is brought in via pressure differential railcars to the WOX unloading area (Pictures I and 3). This area consists of four converging rail lines that move the cars into the unloading area, and five rail lines used for storage of the incoming and outgoing railcars. At time of the inspection, the inspectors were not able to enter the WOX unloading area because railcars were being unloaded and the area had restricted access that requires respirators, Tyveks suits and gloves. The inspectors asked Mr. Harris if there were any known WOX releases from unloading, inside the WOX unloading building or on the rail lines. Mr. Harris stated there were no known releases from the railcars and that the only issue was cleaning the railcars inside the WOX unloading building. At the time of the inspection, incoming railcars had been stored on the rail lines for three weeks because the facility was not in operation.

The WOX is pneumatically loaded and stored in six white silos located next to the WOX unloading building (Picture 2). Lime for pH adjustment is also unloaded in this area and stored in a tall white silo besides the WOX silos. During the walkthrough of the WOX unloading area, the inspectors observed a release of lime from a blow out on the ground and around the rail line (Picture 4). The inspectors observed two stainless steel storage tanks in front of the silos filled with 93% sulfuric acid.

The inspectors passed through the 500 Area (furnace) and 400 Area (electro-winning (EW)). The inspectors observed stacks of zinc plates being dried prior to being placing in the furnace (Picture 5); five 385,000-gallon electrolyte storage tanks with high zinc concentrate mixed with sulfuric acid solution (Picture 6) and the furnace baghouses (Picture 7). Mr. Harris explained that

the zinc dust captured in the hoppers is put back into the process at the 100 Area to mix and create a zinc solution. The secondary containment wall was observed to be cracked and leaking (Pictures 8-9). Mr. Harris explained that the work orders for repairs were scheduled.

10.2. WOX Clarifiers

The WOX clarifiers mixes the WOX with water and sulfuric acid. The inspectors observed the clarifiers were open to the elements. The clarifiers and two stainless steel acid tanks were inside the secondary containment area (Pictures 10-11). At the time of the inspection, the gypsum clarifier (Pictures 17, 23), located downhill from the WOX clarifier, were experiencing blockage problems and were being pumped into the WOX clarifier secondary containment (Pictures 12-13). The inspectors observed that the secondary containment walls of the WOX clarifier had leaking cracks waiting to be repaired and areas that were newly resealed (Pictures 14-16). Mr. Harris explained that the secondary containment was designed to be a 10 to 14 day storage for process use.

10.3. Area 100 - Leaching

The inspection of the Area I00 started at I00A - final zinc discharge building (Picture 22). This building collects the high zinc residue from the process, drops it onto the ground and the residue is frontloaded into piles in the secondary containment/runoff area (Pictures 18, 21). The building was originally designed to drop the residue into the roll-offs but the chutes did not properly align to deposit the residue into the roll-offs, so the roll-offs were removed. Once the high zinc residue is frontloaded into roll-offs, the containers are shipped to Horsehead in Palmerton, PA.

The Leaching Area contained a six-pack of reactors and a clarifier which are the core of the process. At the time of the inspection, Reactors A, B and E were down due to impellor failure because the interior coating had peeled off. The WOX mixture, known as the leaching slurry, added to the reactors from the silos were released to the secondary containment. The inspectors observed that the leaching slurry had dried into a thick and cracked mud and was being walked through by the employees. Leaching slurry residue was seen on the outside of the reactor tanks, on the top of the reactor secondary containment walls, and inside the 100 Area secondary containment (Pictures 24-34).

NCDENR recommended that the HHMP use at least one of the reactor tanks as backup for sudden releases and storage of the leaching slurry. The inspectors also recommended that the leaching slurry already released and stored into the secondary containment be cleaned out and stored into roll-offs and/or containers, which would allow HHMP to pump the slurry back into the reactor tanks. The inspectors understand that HHMP considers the leaching slurry to be a "product-in-process". However the slurry release had been stored in the reactor secondary containment for three weeks, there were footprints from employees and contractors walking through the slurry and the slurry residue was observed outside the reactor secondary containment walls. The EPA advised Mr. Harris and Mr. Scott Hoenecke, Operations Manager, that the leaching slurry contained hazardous constituents (including lead, cadmium and chromium) and releasing the slurry into the secondary containment was not considered to be in-process or to be properly stored and/or contained. The EPA recommends that the slurry be stored in appropriate containers until such time that it can be used in the process.

The reactor clarifier, also located in the same secondary containment as the reactor tanks, was observed to have slurry stains down the side (Pictures 35-36). Mr. Hoenecke explained that the

process causes the slurry to foam. When the slurry is sent to the open top clarifier, the foam overflows the sides of the clarifier and into the secondary containment.

Across from the six-pack reactors was the pregnant liquor solution (PLS) area. The PLS area contained five tanks with sand filters (Pictures 37-38). The PLS process exchanges sulfuric acid for zinc raffinate in a continuous loop. At the time of the inspection, the inspectors observed the PLS secondary containment filled with water and slurry. Mr. Harris and Mr. Hoenecke explained that when the clarifier and reactors shutdown the excess slurry was sent to the PLS secondary containment area. The inspectors also observed white calcium and zinc material floating on top of the water. The EPA again expressed concern for the storage of the WOX slurry.

10.4. Area 200 - Solvent Extraction

The Area 200 contained the processes for zinc electrolyte solution phase separation (Picture 39). The inspectors observed black tanks used to separate water from the zinc, acid and organic solvent solution. Behind the tanks were the process ponds, a maintenance pond, and the West Storm Water Pond (Pictures 40-43). Mr. Harris explained that the zinc raffinate goes, via a green pipe, into the open process ponds. Next was a maintenance pond with orange water. The last pond was the West Storm Water Pond with geese deterrents. This pond was lined for acidic organic solutions and contained acidic water with a red algae bloom. Mr. Hoenecke explained that this pond acts as a catchall from the process areas. The process water came from tank failures and coating failures in the process tanks.

NCDENR requested how much of the water had been placed back into the process. Mr. Hoenecke said that facility was able to reduce the storm waste pond storage from 68% to 54%, by processing the water through bleed treatment.

While leaving Area 200, the inspectors observed hazardous waste roll-offs (Pictures 44-55). The four blue roll-offs were observed labeled for "Carbon Filter Contents", closed and dated. Beside the roll-offs were seven carbon filter tanks with electrolyte filters. At the time of the inspection, the filter tanks were shut down for a first time emergency cleanout due to equipment failure. Two white super sacks were observed in the secondary containment area of the carbon filter tanks. Mr. Harris was asked about the contents of the sacks but could not identify their source. Mr. Hoenecke later explained that the sacks were from carbon filter clean out and required discarding. The super sacks were open, unlabeled and not dated.

In front of the carbon filter tanks was a decontamination bay used for equipment clean out. At the time inspection, a pile of discarded carbon from the carbon filter tanks were inside the bay waiting to be frontloaded into roll-offs. Mr. Harris explained that the discarded carbon had a sample tested using the toxicity characteristic leaching procedure (TCLP). The discarded carbon had a TCLP result of 6.5 ppm of lead which exceeded the regulatory limit of 5.0 mg/L. Therefore, the discarded carbon was uncontained, unlabeled and undated hazardous waste.

Horsehead Metal Products, Inc. is in apparent violation of 15A NCAC 13A.0107 [40 C.F.R. § 265.173(a)] as referenced in 40 C.F.R. § 262.34(a)(1)(i)], which states, except as provided in paragraphs (d), (e), and (f) of this section, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that the waste is placed in containers and the generator complies with the applicable requirements of subpart I of part 265 of this chapter in such that a container holding

hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

Horsehead Metal Products, Inc. is in apparent violation of 15A NCAC 13A.0107 [40 C.F.R. § 262.34(a)(2) and (a)(3)]. Except as provided in paragraphs (d), (e), and (f) of this section, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that the date upon which each period of accumulation begins is clearly marked and visible for inspection on each container; and while being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste".

10.5. Area 400 - Electro-winning

The inspectors were joined by Mr. Diego Rojas, the Electro-winning Supervisor, for the tour of Area 400. Mr. Rojas explained that the process uses 10 foot by 49 foot cells with aluminum cathode bars to attract and plate the zinc electrolyte on one side and lead bars on the other. The zinc plates formed on the cathode molds are removed from the bars with knives (Pictures 56-60). The Area 400, which off gases is sulfuric acid, is covered under an air permit.

The entire building is built with a secondary containment system built under the cells (Picture 64). The basement containment under the cells, when filled with either overflow from the cells or rain water from the roof, are pumped back into the Solvent Exchange. At the time of the inspection, the inspectors observed a hydraulic system located underneath the cells. A hydraulic system connection was leaking oil (Pictures 61-63). Mr. Rojas explained that floor is coated and any releases are contained in the basement and then disposed of.

10.6. Area 500 - Furnaces

The furnaces were designed to handle 16,500 pound bundles of zinc plates, stacked and placed inside (Pictures 5, 65). The zinc is melted and poured into molds for 25-pound and one-ton ingots. The ingots are sold to the steel industry for galvanizing uses, erosion protection of steel, the construction industry and the automotive industry. HHMP produces three products: prime western which contains 1% lead, continuous galvanizing grade which has 1.5% aluminum and a special high grade which is 99% zinc. Across from the Area 500 are four baghouses that capture the zinc dust from the furnace.

10.7. Less than 90-Day HWSA

The less than 90-day hazardous waste storage area (HWSA) is located in the Area 500 warehouse. The inspectors observed a fenced-in area that was locked and marked with warning signs. Inside the enclosure was seven 55-gallon drums of used oil, oily water, oily rags and oily cleanup, and four black 55-gallon drums containing xylene and methyl ethyl ketone; solvent contaminated rags; flammable liquid; and acetone and methanol. The drums were observed labeled, closed and dated (Pictures 66-69).

10.8. Laboratory

The laboratory building contained three lab areas. The main lab area had a black 55-gallon drum with a funnel attached in the satellite accumulation area (Picture 70). The inspectors observed that the funnel was missing the seal and would not prevent a spill if drum was tipped over. The drum was labeled. Mr. Harris stated that he would obtain a ball valve for the funnel to prevent

release. The lab stored empty bottles and containers along the walls for reuse and recycling (Pictures 71-72).

The second lab distilled used trichloroethylene (TCE). The inspectors observed a counter with used TCE bottles (Picture 73). The technician explained the used TCE was considered "waste in process" and would be recycled when it was no longer usable. The inspectors advised that the lab technicians monitor the volume of used TCE on the counter and ensure that the volume stay under 55-gallons.

10.9. Maintenance

The Maintenance Area contained two 55-gallon used oil drums, one with a funnel on top; a red flip-top flammable can used for oily rags and a universal waste storage cabinet (Pictures 74-77). At the time of the inspection, the inspectors observed that the boxes of universal waste lamps were labeled, closed but not dated.

Horsehead Metal Products, Inc. is in apparent violation of 15A NCAC 13A.0119(b) [40 C.F.R. § 273.15(c)], which states that a small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

Records Review

After the walkthrough, the inspectors requested training records, contingency plan, the hazardous, non-hazardous, used oil and the universal waste manifests. The generator status notification (EPA Form 8700-12) was last updated June 19, 2014.

Mr. Jim Harris received the NCDENR 8-Hour Basic Hazardous Waste Compliance for Generators training course on May 22, 2014 and May 9, 2013. No deficiencies were observed.

The contingency plan was not available for review. HHMP updated their status to Large Quantity Generator on June 19, 2014. The contingency plan was being developed at the time of the inspection.

The hazardous and non-hazardous waste outbound manifests and land disposal forms were reviewed. Hazardous acetone and xylene wastes, waste paint, leach residue cleanup debris and neutralized acid with soil were removed and disposed of by Dart Acquisitions (EPA ID NCD121700777) in Charlotte, NC; EWS Alabama (EPA ID ALD981020894) in Glenco, AL; Chemical Waste Management (EPA ID ALD000622464) in Emelle, AL and ECOFLO, Inc. (EPA ID NCD980842132) in Greensboro, NC. The land disposal restriction forms were reviewed.

Oily water is disposed of by Dart Acquisitions (EPA ID SCR000074575) and JBR Environmental Services (EPA ID SCR000004358) in Spartanburg, SC.

Waste gypsum is disposed of by Waste Management Palmetto Landfill in Wellford, SC.

Summary

The closing conference was held with representatives of HHMP, NCDENR and the EPA. During this meeting, the EPA and NCDENR presented the preliminary results of the inspection, HHMP was inspected as a large quantity generator of hazardous waste. At the time of the inspection, HHMP did not appear to be in compliance with some requirements of RCRA.

11) Signed

Paula A. Whiting, Inspector

10/14/14 Date

12) Concurrence

Nancy McKee

Chief, North Enforcement and Compliance Section RCRA and OPA Enforcement and Compliance Branch

0114/14

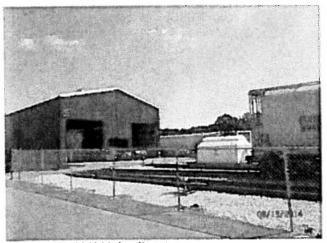
ATTACHMENT A

HORSEHEAD METAL PRODUCTS, INC.

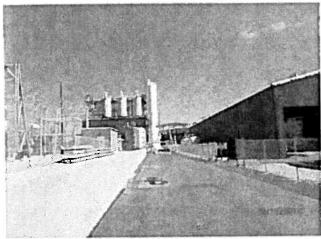
MOORESBORO, NORTH CAROLINA

COMPLIANCE EVALUATION INSPECTION PHOTOGRAPHS

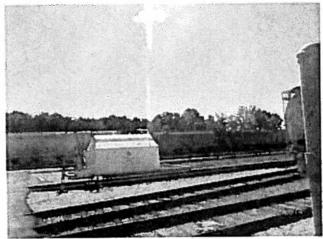
AUGUST 13, 2014



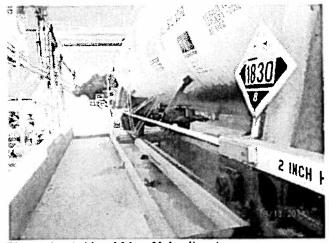
Picture I - WOX Unloading Area



Picture 2 - WOX Silos and Lime Silo



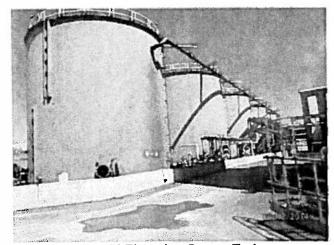
Picture 3 - WOX Railcars and tracks



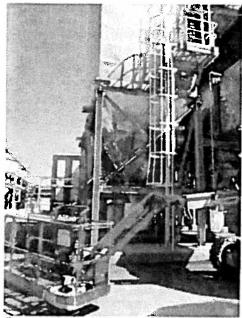
Picture 4 - Acid and Lime Unloading Area



Picture 5 - Area 500 Furnace with stacks of zinc plates



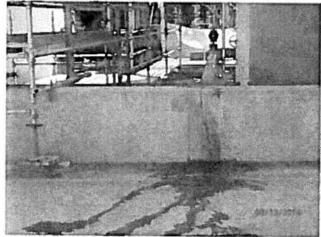
Picture 6 - Area 400 Electrolyte Storage Tanks



Picture 7 - Area 500 Furnace Baghouses

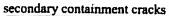


Picture 8 - Area 400 Electrolyte Storage Tanks with secondary containment cracks



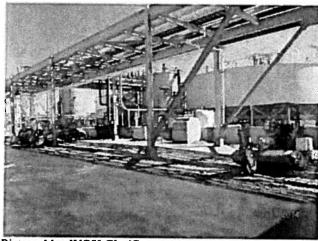
Picture 9 - Area 400 Electrolyte Storage Tanks with

EPA-RCRA CEI Report Horsehead Metal Products, Inc. NCR000159038 August 13, 2014

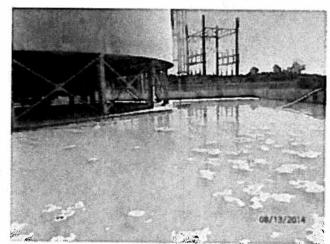




Picture 10 - WOX Clarifier



Picture 11 - WOX Clarifier



Picture 12 – WOX Clarifier secondary containment storing Gypsum Clarifier process water



Picture 13 - Gypsum Clarifier process water with gypsum solids

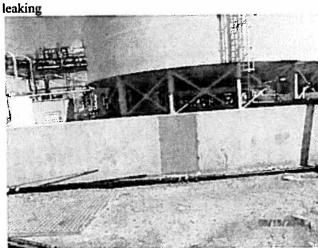


Picture 14 – WOX Clarifier secondary containment crack leaking

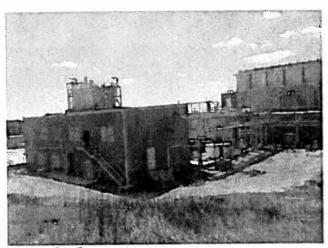


EPA-RCRA CEI Report Horsehead Metal Products, Inc. NCR000159038 August 13, 2014

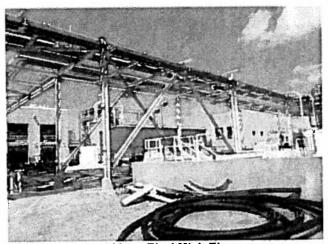
Picture 15 – WOX Clarifier secondary containment crack



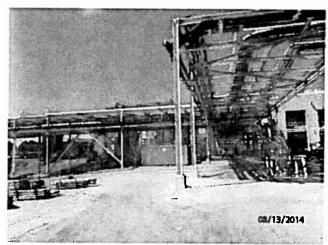
Picture 16 – WOX Clarifier secondary containment crack repaired



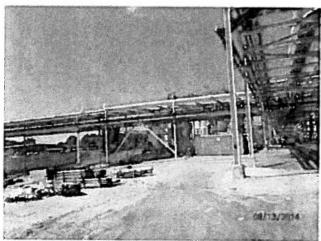
Picture 17 - Gypsum Area



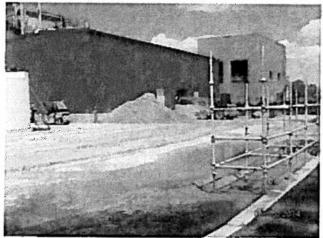
Picture 18 - Area 100A - Final High Zinc



Picture 19 - Area 300



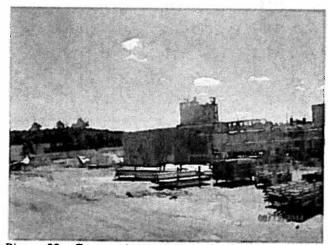
Picture 20 - Area 300



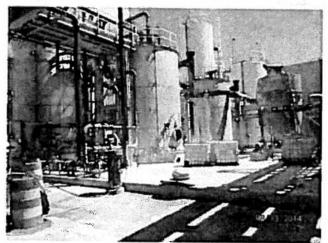
Picture 21 - Area 100A with High Zinc stored on the ground



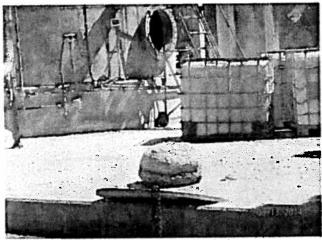
Picture 22 - Area 100A Final High Zinc discharge building



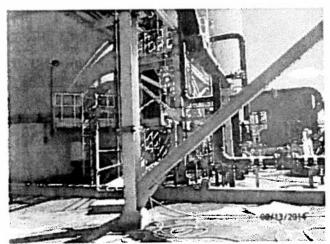
Picture 23 - Gypsum Area



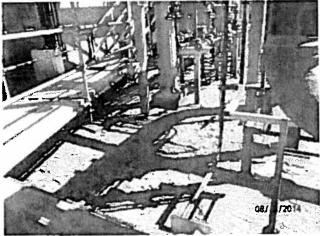
Picture 24 - Area 100 Leaching



Picture 25 - Area 100 Leaching WOX ball



Picture 26 - Area 100 Leaching



Picture 27 – Area 100 Leaching WOX mixture released to the secondary containment



Picture 28 - Area 100 Leaching dried WOX mixture on the ground



Picture 29 – Area 100 Leaching WOX mixture released to the secondary containment

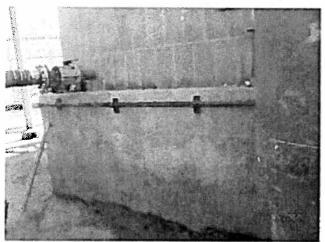


EPA-RCRA CEI Report Horsehead Metal Products, Inc. NCR000159038 August 13, 2014

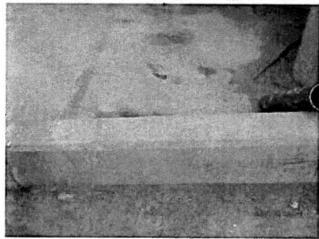
Picture 30 - Area 100 Leaching WOX mixture released to the secondary containment



Picture 31 - Area 100 Leaching WOX mixture released to the secondary containment



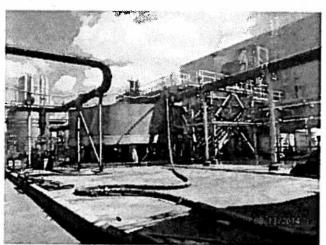
Picture 32 - Area 100 Leaching WOX mixture residual dried on the wall



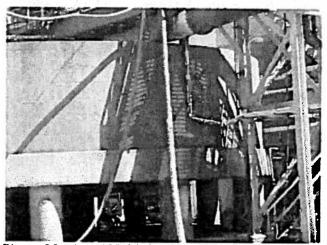
Picture 33 - Area 100 Leaching WOX mixture residual dried on the wall



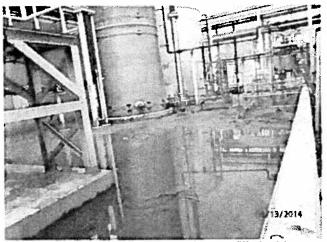
Picture 34 - Area 100 Leaching WOX mixture residual dried on the ground



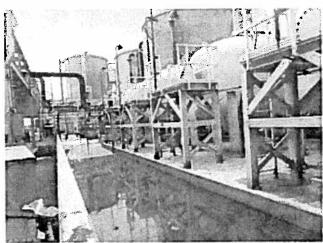
Picture 35 - Area 100 Clarifier



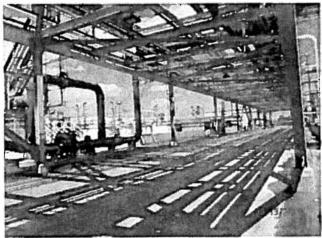
Picture 36 - Area 100 dried WOX mixture on the sides



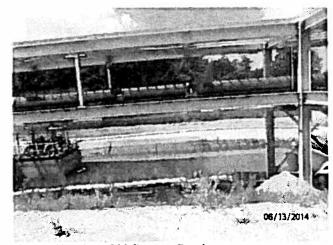
Picture 37 - Area 100A PLS Containment filled with **WOX** mixture



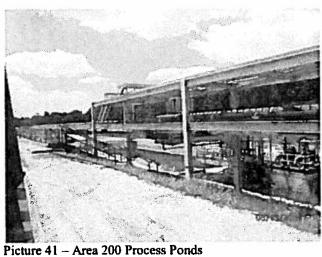
Picture 38 - Area 100A PLS Containment filled with WOX mixture and calcium

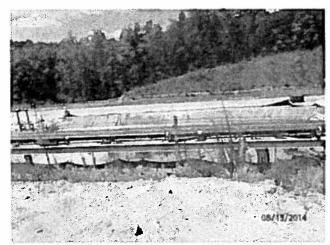


Picture 39 - Area 200

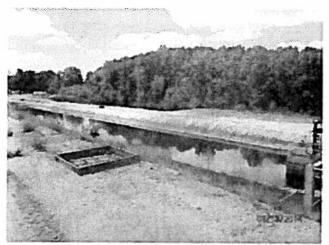


Picture 40 - Area 200 Process Ponds

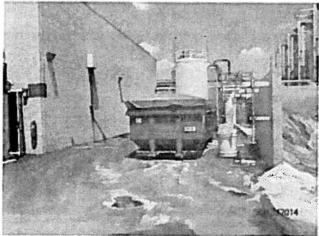




Picture 42 - Area 200 Maintenance Pond



Picture 43 - West Stormwater Pond with geese deterrent



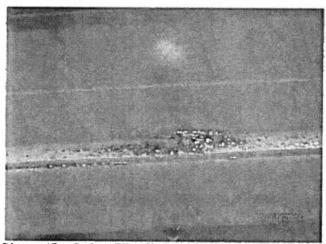
Picture 44 - Carbon Filter Tank hazardous waste roll-offs



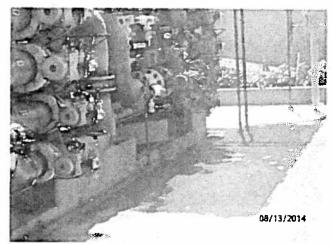
Picture 45 - Carbon Filter Tank lead contaminated carbon



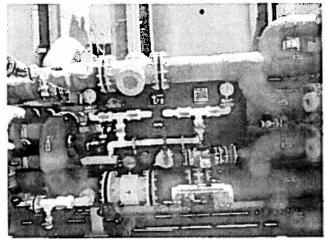
Picture 46 - Carbon Filter Tank hazardous waste roll-off label



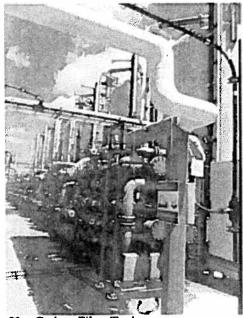
Picture 47 - Carbon Filter Tank hazardous waste roll-off 1



Picture 48 – Carbon Filter Tank lead contaminated carbon inside secondary containment



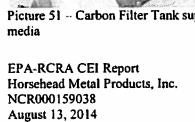
Picture 49 - Carbon Filter Tank piping



Picture 50 - Carbon Filter Tanks



Picture 51 - Carbon Filter Tank supersaks of unknown

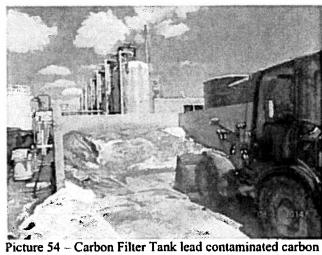


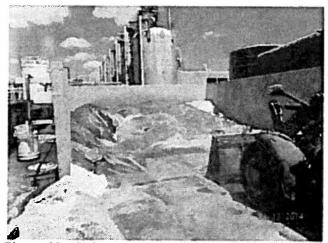


Picture 52 - Carbon Filter Tank supersaks of unknown media

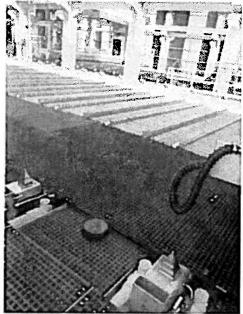


Picture 53 - Carbon Filter Tank supersaks of unknown media

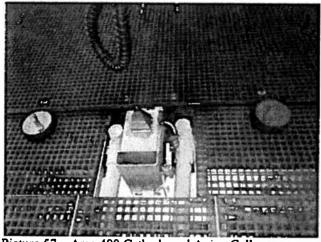




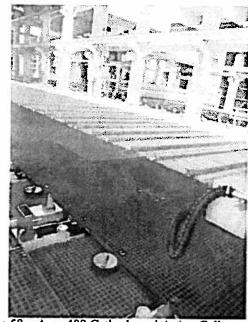
Picture 55 - Carbon Filter Tank lead contaminated carbon



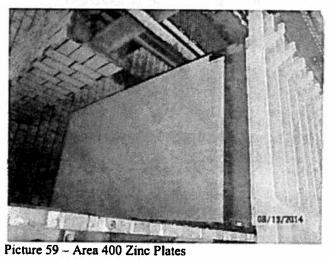
Picture 56 - Area 400 Cathode and Anion Cells

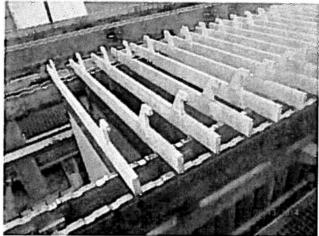


Picture 57 - Area 400 Cathode and Anion Cells

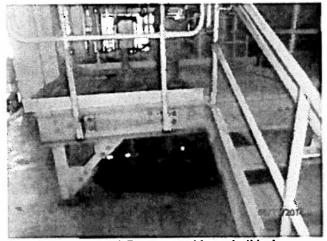


Picture 58 - Area 400 Cathode and Anion Cells

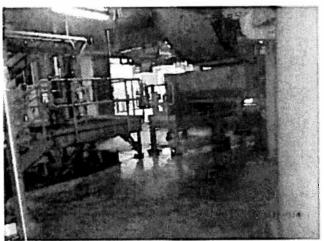




Picture 60 - Area 400 Zinc Plates



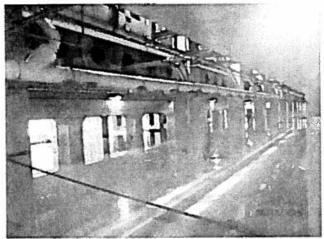
Picture 61 - Area 400 Basement with used oil leak



Picture 62 - Area 400 Basement with used oil leak



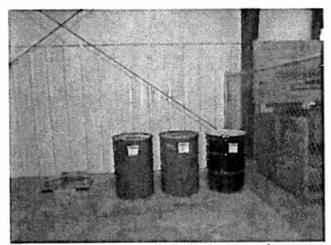
Picture 63 - Area 400 Basement with used oil leak



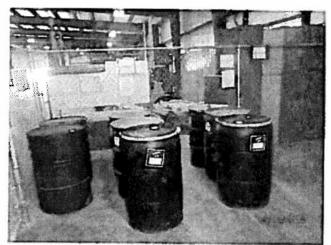
Picture 64 - Area 400 Basement underneath the cells



Picture 65 - Area 500 Furnace stack of zinc plates



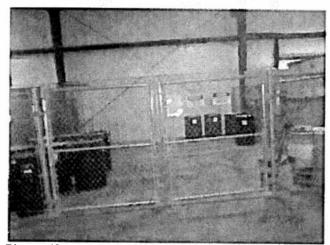
Picture 66 - Area 500 HWSA hazardous waste drums



Picture 67 - Area 500 HWSA used oil drums



Picture 68 - Area 500 HWSA hazardous waste drums



Picture 69 - Area 500 HWSA



Picture 70 - Lab HWSAA solvent drum



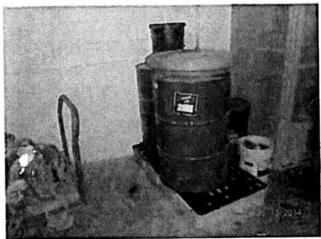
Picture 71 - Lab RCRA empty bottles



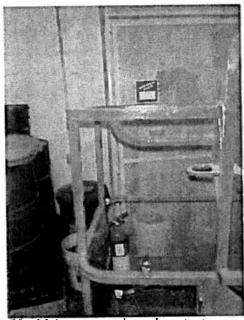
Picture 72 - Lab RCRA empty bottles



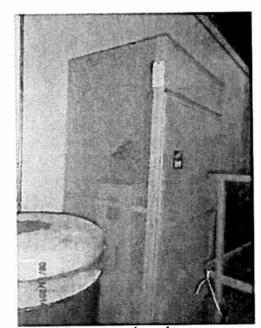
Picture 73 - Lab used TCE solvent recycling area



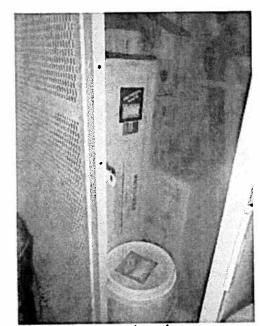
Picture 74 - Maintenance used oil drum



Picture 75 - Maintenance universal waste storage



Picture 76 - Maintenance universal waste storage



Picture 77 - Maintenance universal waste storage